

Selecciones y *join* de datos en D3.js

IIC2026

Join de datos en D3.js I

Selecciones y *join* de datos en D3.js

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Vincular datos con elementos

Vincular datos con elementos

Podemos generar un vínculo de marcas y canales con datos mediante código.

```
<svg>  
  <rect></rect>  
  <circle></circle>  
  <path></path>  
</svg>
```

```
<svg>  
  <rect></rect>  
  <circle></circle>  
  <path></path>  
</svg>
```

```
const datos = [23, 45, 120, 64];
```

```
<svg>
  <rect></rect>
  <circle></circle>
  <path></path>
</svg>
```

```
const datos = [
  {nombre: "Ana", edad: 23},
  {nombre: "Bea", edad: 44},
  ...
];
```

```
<svg id="svg" width="400" height="250">  
  <rect></rect>  
  <rect></rect>  
  <rect></rect>  
  <rect></rect>  
</svg>
```

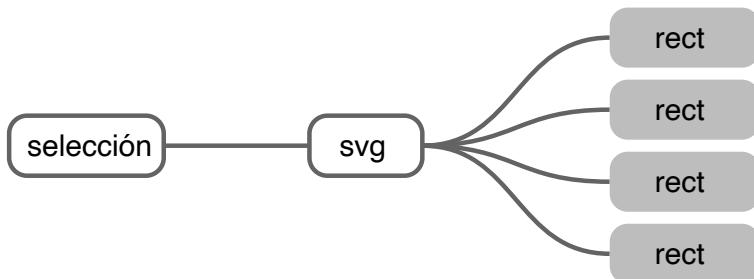


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<svg id="svg" width="400" height="250">  
  <rect></rect>  
  <rect></rect>  
  <rect></rect>  
  <rect></rect>  
</svg>
```

```
d3.select("#svg")  
  .selectAll("rect");
```

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<svg id="svg" width="400" height="250">  
  <rect></rect>  
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  <rect></rect>  
  <rect></rect>  
</svg>
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```
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  .selectAll("rect");
```



seleccion.data

```
1 const datos = [23, 45, 120, 64];  
2  
3 d3.select("#svg")  
4   .selectAll("rect")  
5   .data(datos);
```

seleccion.data

```
1 const datos = [23, 45, 120, 64];  
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3 d3.select("#svg")  
4   .selectAll("rect")  
5   .data(datos);
```

- Hay datos que no se le asocian elementos
- Hay elementos y datos que se asocian entre ellos
- Hay elementos que no se le asocian datos

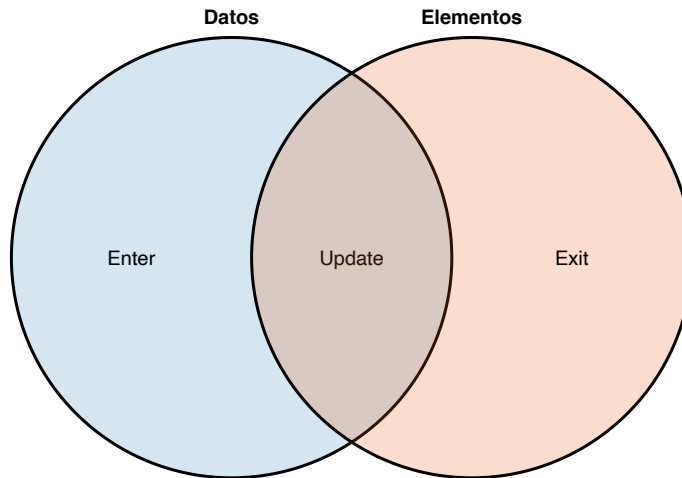
seleccion.data

```
1 const datos = [23, 45, 120, 64];  
2  
3 d3.select("#svg")  
4   .selectAll("rect")  
5   .data(datos);
```

- Hay datos que no se le asocian elementos ➡ *enter*
- Hay elementos y datos que se asocian entre ellos ➡ *update*
- Hay elementos que no se le asocian datos ➡ *exit*

seleccion.data

- Hay datos que no se le asocian elementos ➡ *enter*
- Hay elementos y datos que se asocian entre ellos ➡ *update*
- Hay elementos que no se le asocian datos ➡ *exit*



Update

```
1 const datos = [23, 45, 120, 64];  
2  
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5   .data(datos);
```

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<svg id="svg" width="400" height="250">  
  <rect></rect> <!-- 23 -->  
  <rect></rect> <!-- 45 -->  
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  <rect></rect> <!-- 64 -->  
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Update

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  <rect></rect> <!-- 23 -->  
  <rect></rect> <!-- 45 -->  
  <rect></rect> <!-- 120 -->  
  <rect></rect> <!-- 64 -->  
</svg>
```


Update

```
1 const datos = [23, 45, 120, 64];
2
3 const update = d3.select("#svg")
4   .selectAll("rect")
5   .data(datos);
6
7 update.attr("width", 50)
8   .attr("y", 0)
9   .attr("x", (d, i, all) => i * 100);
```

```
<svg id="svg" width="400" height="250">
  <rect></rect> <!-- 23 -->
  <rect></rect> <!-- 45 -->
  <rect></rect> <!-- 120 -->
  <rect></rect> <!-- 64 -->
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```

```
<svg id="svg" width="400" height="250">
  <rect width="50" y="0" x="0"></rect> <!-- 23 -->
  <rect width="50" y="0" x="100"></rect> <!-- 45 -->
  <rect width="50" y="0" x="200"></rect> <!-- 120 -->
  <rect width="50" y="0" x="300"></rect> <!-- 64 -->
</svg>
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Update

```
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5   .data(datos);
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9   .attr("x", (d, i, all) => i * 100)
10  .attr("height", (d, i, all) => 2 * d);
```

```
<svg id="svg" width="400" height="250">
  <rect width="50" y="0" x="0"></rect> <!-- 23 -->
  <rect width="50" y="0" x="100"></rect> <!-- 45 -->
  <rect width="50" y="0" x="200"></rect> <!-- 120 -->
  <rect width="50" y="0" x="300"></rect> <!-- 64 -->
</svg>
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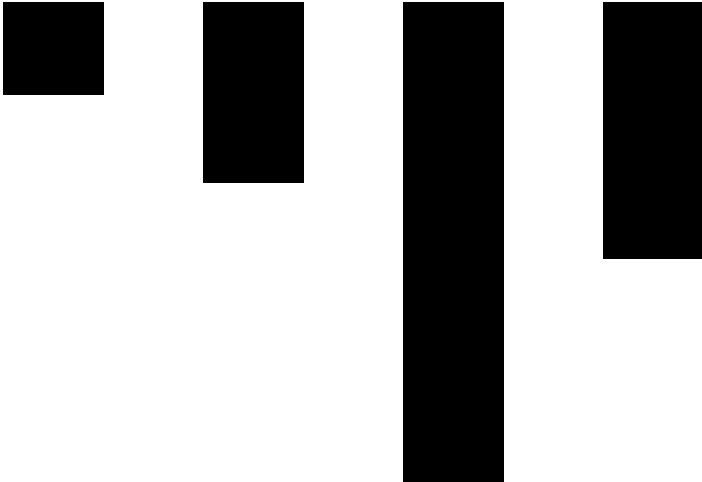
Update

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```

```
<svg id="svg" width="400" height="250">
  <rect width="50" y="0" x="0" height="46"></rect> <!-- 23 -->
  <rect width="50" y="0" x="100" height="90"></rect> <!-- 45 -->
  <rect width="50" y="0" x="200" height="240"></rect> <!-- 120 -->
  <rect width="50" y="0" x="300" height="128"></rect> <!-- 64 -->
</svg>
```

Update

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1 const datos = [23, 45, 120, 64];  
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3 const update = d3.select("#svg")  
4   .selectAll("rect")  
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8   .attr("y", 0)  
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Exit

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<svg id="svg" width="400" height="250">  
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1 const datos = [23, 45];  
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5   .data(datos);
```

```
<svg id="svg" width="400" height="250">  
  <rect></rect> <!-- 23 -->  
  <rect></rect> <!-- 45 -->  
  <rect></rect> <!-- ? -->  
  <rect></rect> <!-- ? -->  
</svg>
```

Exit

```
<svg id="svg" width="400" height="250">
  <rect></rect>
  <rect></rect>
  <rect></rect>
  <rect></rect>
</svg>
```

```
1 const datos = [23, 45];
2
3 const update = d3.select("#svg")
4   .selectAll("rect")
5   .data(datos);
6
7 update.exit().remove();
```

```
<svg id="svg" width="400" height="250">
  <rect></rect> <!-- 23 -->
  <rect></rect> <!-- 45 -->
  <rect></rect> <!-- ? -->
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5   .data(datos)  
6   .enter();
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1 const datos = [23, 45, 120, 64];  
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3 d3.select("#svg")  
4   .selectAll("rect")  
5   .data(datos)  
6   .enter()  
7   .append("rect");
```

```
<svg id="svg" width="400" height="250">  
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Enter

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11   .attr("height", (d, i, all) => 2 * d);
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</svg>
```

```
1  const svg = d3.select("body").append("svg");
2
3  const datos = [150, 256, 130, 0, 23, 422, 235];
4
5  svg.attr("width", 50 + datos.length * 100).attr("height", 500);
6
7  svg
8    .selectAll("rect")
9    .data(datos)
10   .enter()
11   .append("rect")
12   .attr("width", 50)
13   .attr("fill", "magenta")
14   .attr("height", (d) => d)
15   .attr("x", (_, i) => 50 + i * 100);
```

```
1 const svg = d3.select("body").append("svg");
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5 svg.attr("width", 50 + datos.length * 100).attr("height", 500);
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13  .attr("fill", "magenta")
14  .attr("height", (d) => d)
15  .attr("x", (_, i) => 50 + i * 100);
```



```
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```

Join de datos en D3.js I

Selecciones y *join* de datos en D3.js

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¡Deja tus preguntas en los comentarios!